

## REMARKS

The Examiner is thanked for the thorough Examination of the present application. The FINAL Office Action, however, continued to reject all claims 1-20. In response, Applicant has cancelled claims 1-20, and added new claims 21-31. Consequently, the cancellation of claims 1-20 renders all outstanding rejections moot. Notwithstanding, Applicant sets forth the following additional distinguishing remarks in an effort to advance the prosecution of these claims.

As an initial matter, Applicant notes that the new claims do not add any new matter to this application, as the newly added features are clearly supported by the original application (see e.g., paragraph 0030-0043 and in FIG. 2 of the original application). Reconsideration of this application is respectfully requested in light of the amendments and the remarks contained below.

### **Rejections under 35 USC 102/103**

Claims 1, 3, 5, 7, 9, 11, and 15-20 stand rejected under 35 USC 102(b) as allegedly anticipated by US Patent number 5,925,255 to Mukhopadhyay. Claims 2, 4, 6, 8, 10, and 12 stand rejected under 35 USC 103(a) as allegedly unpatentable over Mukhopadhyay in view of US patent number 5, 951, 874 to Jangbarwala et al. Claim 13 stands rejected under 35 USC 103(a) as allegedly unpatentable over Mukhopadhyay in view of U.S. patent 3,143,581 to Walter. Claim 14 stands rejected under 35 U.S.C 103(a) as allegedly unpatentable over Mukhopadhyay in view of Walter, and further in view of Jangbarwala et al. As noted above, these rejections have been rendered moot by the cancellation of claims 1-20.

### **New claims**

Independent claims 21 and 27 have been newly added to emphasize providing the base dosing system in fluid communication for raising a PH value of the wastewater to the first value without lowering, and providing the high-efficiency reverse osmosis system for raising the first PH value to the second value.

Namely, the PH value of the wastewater is raised to the first value and further to the second value through the base dosing system and the high-efficiency reverse osmosis system of the water purification system without being lowered.

In this regard, Mukhopadyay teaches a process for treatment of water involving adding acid to water when water flow out from weak acid cation resin (column 10, lines 5-11; column 12, lines 2-11; and column 22, lines 14-25), and then injecting a soluble alkali to water for raising PH of water to 10.0 or higher. However, taking into consideration the teaching of all these documents, it is clear that PH of water is lowered first and then raised to desired value by adding acid and alkali solution in sequence to water.

Thus, there is no cited reference disclosing such a base dosing wafer purification system treating waste water with raising a PH value without first lowering the value during the process.

As specifically recited in independent claims 21 and 27:

21. A water purification system for purifying wastewater, comprising:
  - an ion exchange unit for removing ions from the wastewater;
  - a base dosing system in fluid communication for raising a PH of the wastewater to a first PH value without lowering;***
  - a high-efficiency reverse osmosis system for further removing ions

from the wastewater and ***further directly raising the first PH value of the wastewater to a second PH value.***

27. A method for purifying wastewater comprising:
  - providing an ion exchange unit for removing ions from the wastewater;
  - providing a base dosing system in fluid communication for raising a PH of the wastewater to a first PH value without lowering;***
  - providing a high-efficiency reverse osmosis system comprising one first stage of multiple membranes and one second stage of a membrane in fluid communication for ***further removing ions from the wastewater and further raising the first PH value to a second PH value;***

(*Emphasis added*). Claims 1 and 27 define over the cited art for at least the reason that the cited art fails to disclose the combination of features emphasized above.

Therefore, claims 21, and 27 are in condition for allowance. Insofar as claims 22-26, and 28-31 are dependent claims that incorporate the features of claims 21, and 27 respectively, these claims also are in condition for allowance.

A credit card authorization is provided herewith to cover the fees associated with the accompanying extension of time and the RCE application. No additional fee is believed to be due in connection with this submission. If, however, any additional fee is deemed to be payable, you are hereby authorized to charge any such fee to Deposit Account No. 20-0778.

Respectfully submitted,

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